

1644

1600

RAW SEQUENCE LISTING  
 PATENT APPLICATION: US/08/653,294C

DATE: 01/04/2002  
 TIME: 14:57:23

Input Set : N:\EBONY'S\ES.txt  
 Output Set: N:\CRF3\01042002\H653294C.raw

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TECH CENTER 1600/2900

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#  
SD  
60  
1-2002

5 <110> APPLICANT: Stanford University  
 7 Clayberger, Carol  
 9 Krensky, Alan  
 11 Buelow, Roland  
 15 <120> TITLE OF INVENTION: IMMUNOMODULATING DIMERS  
 19 <130> FILE REFERENCE: 20600-20200.23  
 23 <140> CURRENT APPLICATION NUMBER: 08/653,294C  
 25 <141> CURRENT FILING DATE: 1996-05-24  
 29 <150> PRIOR APPLICATION NUMBER: US 08/222,851  
 31 <151> PRIOR FILING DATE: 1994-04-05  
 35 <150> PRIOR APPLICATION NUMBER: US 07/844,716  
 37 <151> PRIOR FILING DATE: 1992-03-02  
 41 <150> PRIOR APPLICATION NUMBER: US 07/755,584  
 43 <151> PRIOR FILING DATE: 1991-09-03  
 47 <150> PRIOR APPLICATION NUMBER: US 07/672,147  
 49 <151> PRIOR FILING DATE: 1991-03-19  
 53 <150> PRIOR APPLICATION NUMBER: US 07/561,246  
 55 <151> PRIOR FILING DATE: 1990-07-30  
 59 <150> PRIOR APPLICATION NUMBER: US 07/008,846  
 61 <151> PRIOR FILING DATE: 1987-01-30  
 65 <160> NUMBER OF SEQ ID NOS: 42  
 69 <170> SOFTWARE: FastSEQ for Windows Version 4.0  
 73 <210> SEQ ID NO: 1  
 75 <211> LENGTH: 10  
 77 <212> TYPE: PRT  
 79 <213> ORGANISM: Homo sapiens  
 83 <220> FEATURE:  
 85 <221> NAME/KEY: VARIANT  
 87 <222> LOCATION: (1)...(10)  
 89 <223> OTHER INFORMATION: Xaa at location 2 is E or V;  
 91 Xaa at location 3 is D, S or N;  
 93 Xaa at location 5 is R or G;  
 95 Xaa at location 6 is I or N;  
 97 <220> FEATURE:  
 99 <223> OTHER INFORMATION: Xaa at location 7 is a hydrophobic or small amino acid  
 101 Xaa at location 8 is R or L;  
 103 Xaa at location 9 is G or R;  
 105 Xaa at location 10 is a hydrophobic or small amino acid  
 109 <400> SEQUENCE: 1  
 111 Arg Xaa Xaa Leu Xaa Xaa Xaa Xaa Xaa Xaa  
 113 1 5 10  
 117 <210> SEQ ID NO: 2  
 119 <211> LENGTH: 10  
 121 <212> TYPE: PRT  
 123 <213> ORGANISM: Homo sapiens  
 127 <220> FEATURE:  
 129 <221> NAME/KEY: VARIANT

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131 <222> LOCATION: (1)...(10)

133 <223> OTHER INFORMATION: Xaa at location 1 is a hydrophobic or small amino acid;

135 Xaa at location 2 is G or R;

137 Xaa at location 3 is R or L;

139 Xaa at location 4 is a hydrophobic or small amino acid;

141 <220> FEATURE:

143 <223> OTHER INFORMATION: Xaa at location 5 is I or N;

145 Xaa at location 6 is R or G;

147 Xaa at location 8 is D, S or N;

149 Xaa at location 9 is E or V

OK 153 <400> SEQUENCE: 2

155 Xaa Xaa Xaa Xaa Xaa Xaa Leu Xaa Xaa Arg

157 1 5 10

161 <210> SEQ ID NO: 3

163 <211> LENGTH: 9

165 <212> TYPE: PRT

167 <213> ORGANISM: Homo sapiens

171 <220> FEATURE:

173 <221> NAME/KEY: VARIANT

175 <222> LOCATION: (1)...(9)

177 <223> OTHER INFORMATION: Xaa at location 3 is Any Amino Acid;

179 Xaa at location 6 is N or I; or any amino acid of at least five carbon atoms;

181 Xaa at location 7 is I or hydrophobic or small amino acid;

183 <220> FEATURE:

185 <223> OTHER INFORMATION: Xaa at location 8 R or any aliphatic amino acid of at least five carbon atoms;

187 Xaa at location 9 is G or R or any aliphatic amino acid

OK 191 <400> SEQUENCE: 3

193 Arg Glu Xaa Leu Arg Xaa Xaa Xaa Xaa

195 1 5

199 <210> SEQ ID NO: 4

201 <211> LENGTH: 6

203 <212> TYPE: PRT

205 <213> ORGANISM: Homo sapiens

209 <400> SEQUENCE: 4

211 Arg Ile Ala Leu Arg Tyr

213 1 5

217 <210> SEQ ID NO: 5

219 <211> LENGTH: 6

221 <212> TYPE: PRT

223 <213> ORGANISM: Homo sapiens

225 <400> SEQUENCE: 5

227 Arg Ile Leu Leu Arg Tyr

229 1 5

233 <210> SEQ ID NO: 6

235 <211> LENGTH: 6

237 <212> TYPE: PRT

239 <213> ORGANISM: Homo sapiens

243 <400> SEQUENCE: 6

245 Tyr Arg Leu Leu Ile Arg

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Input Set : N:\EBONY'S\ES.txt

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251 <210> SEQ ID NO: 7  
253 <211> LENGTH: 6  
255 <212> TYPE: PRT  
257 <213> ORGANISM: Homo sapiens  
261 <400> SEQUENCE: 7  
263 Tyr Arg Leu Ala Ile Arg  
265 1 5  
269 <210> SEQ ID NO: 8  
271 <211> LENGTH: 10  
273 <212> TYPE: PRT  
275 <213> ORGANISM: Homo sapiens  
279 <400> SEQUENCE: 8  
281 Arg Glu Asn Leu Arg Ile Ala Leu Arg Tyr  
283 1 5 10  
287 <210> SEQ ID NO: 9  
289 <211> LENGTH: 10  
291 <212> TYPE: PRT  
293 <213> ORGANISM: Homo sapiens  
297 <400> SEQUENCE: 9  
299 Tyr Arg Leu Ala Ile Arg Leu Asn Glu Arg  
301 1 5 10  
305 <210> SEQ ID NO: 10  
307 <211> LENGTH: 10  
309 <212> TYPE: PRT  
311 <213> ORGANISM: Homo sapiens  
315 <400> SEQUENCE: 10  
317 Arg Glu Asn Leu Arg Ile Leu Leu Arg Tyr  
319 1 5 10  
323 <210> SEQ ID NO: 11  
325 <211> LENGTH: 10  
327 <212> TYPE: PRT  
329 <213> ORGANISM: Homo sapiens  
333 <400> SEQUENCE: 11  
335 Tyr Arg Leu Leu Ile Arg Leu Asn Glu Arg  
337 1 5 10  
341 <210> SEQ ID NO: 12  
343 <211> LENGTH: 10  
345 <212> TYPE: PRT  
347 <213> ORGANISM: Homo sapiens  
351 <400> SEQUENCE: 12  
353 Arg Glu Asp Leu Arg Ile Ala Leu Arg Tyr  
355 1 5 10  
359 <210> SEQ ID NO: 13  
361 <211> LENGTH: 10  
363 <212> TYPE: PRT  
365 <213> ORGANISM: Homo sapiens  
369 <400> SEQUENCE: 13  
371 Tyr Arg Leu Ala Ile Arg Leu Asp Glu Arg

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Input Set : N:\EBONY'S\ES.txt

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```

373 1 5 10
377 <210> SEQ ID NO: 14
379 <211> LENGTH: 10
381 <212> TYPE: PRT
383 <213> ORGANISM: Homo sapiens
387 <400> SEQUENCE: 14
389 Arg Glu Asp Leu Arg Ile Leu Leu Arg Tyr
391 1 5 10
395 <210> SEQ ID NO: 15
397 <211> LENGTH: 10
399 <212> TYPE: PRT
401 <213> ORGANISM: Homo sapiens
405 <400> SEQUENCE: 15
407 Tyr Arg Leu Leu Ile Arg Leu Asp Glu Arg
409 1 5 10
413 <210> SEQ ID NO: 16
415 <211> LENGTH: 12
417 <212> TYPE: PRT
419 <213> ORGANISM: Homo sapiens
423 <400> SEQUENCE: 16
425 Tyr Arg Leu Leu Ile Arg Arg Ile Leu Leu Arg Tyr
427 1 5 10
431 <210> SEQ ID NO: 17
433 <211> LENGTH: 12
435 <212> TYPE: PRT
437 <213> ORGANISM: Homo sapiens
441 <400> SEQUENCE: 17
443 Tyr Arg Leu Leu Ile Arg Arg Ile Ala Leu Arg Tyr
445 1 5 10
449 <210> SEQ ID NO: 18
451 <211> LENGTH: 12
453 <212> TYPE: PRT
455 <213> ORGANISM: Homo sapiens
459 <400> SEQUENCE: 18
461 Tyr Arg Leu Ala Ile Arg Arg Ile Leu Leu Arg Tyr
463 1 5 10
467 <210> SEQ ID NO: 19
469 <211> LENGTH: 12
471 <212> TYPE: PRT
473 <213> ORGANISM: Homo sapiens
477 <220> FEATURE:
479 <221> NAME/KEY: VARIANT
481 <222> LOCATION: (1)...(12)
483 <223> OTHER INFORMATION: Xaa = D-Arginine
487 <400> SEQUENCE: 19
489 Tyr Arg Leu Ala Ile Xaa Arg Ile Ala Leu Arg Tyr
491 1 5 10
495 <210> SEQ ID NO: 20
497 <211> LENGTH: 14

```

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Input Set : N:\EBONY'S\ES.txt

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499 <212> TYPE: PRT  
 501 <213> ORGANISM: Homo sapiens  
 505 <220> FEATURE:  
 507 <221> NAME/KEY: VARIANT  
 509 <222> LOCATION: (1)...(14)  
 511 <223> OTHER INFORMATION: Xaa = D-Isoleucin  
 515 <400> SEQUENCE: 20  
 517 Tyr Arg Leu Ala Ile Arg Ile Xaa Arg Ile Leu Leu Arg Tyr  
 519 1 5 10  
 523 <210> SEQ ID NO: 21  
 525 <211> LENGTH: 15  
 527 <212> TYPE: PRT  
 529 <213> ORGANISM: Homo sapiens  
 533 <400> SEQUENCE: 21  
 535 Ala Tyr Arg Leu Leu Ile Lys Val Ile Arg Ile Val Leu Lys Tyr  
 537 1 5 10 15  
 541 <210> SEQ ID NO: 22  
 543 <211> LENGTH: 17  
 545 <212> TYPE: PRT  
 547 <213> ORGANISM: Homo sapiens  
 551 <400> SEQUENCE: 22  
 553 Ser Tyr Lys Leu Val Ile Lys Ile Asn Asn Ile Arg Ile Val Val Lys  
 555 1 5 10 15  
 557 Phe  
 563 <210> SEQ ID NO: 23  
 565 <211> LENGTH: 10  
 567 <212> TYPE: PRT  
 569 <213> ORGANISM: Homo sapiens  
 573 <400> SEQUENCE: 23  
 575 Arg Glu Asp Leu Arg Thr Leu Leu Arg Tyr  
 577 1 5 10  
 581 <210> SEQ ID NO: 24  
 583 <211> LENGTH: 10  
 585 <212> TYPE: PRT  
 587 <213> ORGANISM: Homo sapiens  
 591 <400> SEQUENCE: 24  
 593 Arg Glu Ser Leu Arg Asn Leu Arg Gly Tyr  
 595 1 5 10  
 599 <210> SEQ ID NO: 25  
 601 <211> LENGTH: 10  
 603 <212> TYPE: PRT  
 605 <213> ORGANISM: Homo sapiens  
 609 <400> SEQUENCE: 25  
 611 Arg Glu Asn Leu Arg Thr Ala Leu Arg Tyr  
 613 1 5 10  
 617 <210> SEQ ID NO: 26  
 619 <211> LENGTH: 20  
 621 <212> TYPE: PRT  
 623 <213> ORGANISM: Homo sapiens

Use of n and/or Xaa has been detected in the Sequence Listing.  
 Review the Sequence Listing to insure a corresponding  
 explanation is presented in the <220> to <223> fields of  
 each sequence using n or Xaa.

## VERIFICATION SUMMARY

DATE: 01/04/2002

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Input Set : N:\EBONY'S\ES.txt

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L:111 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1  
L:155 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2  
L:193 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3  
L:489 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19  
L:517 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20  
L:897 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:38  
L:935 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:39